

1 Claims

2 1. A method for yielding a virtual processor within a logically
3 partitioned data processing system, wherein the system supports a plurality of
4 partitions, a first of which includes a plurality of virtual processors that share
5 at least one CPU, the method comprising:

6 requesting with a yielding virtual processor a yield of the CPU
7 upon which the virtual processor is executing, including designating a target
8 virtual processor from among the plurality of virtual processors; and

9 switching-in the target virtual processor for execution by the
10 CPU in response to the requested yield.

1 2. The method according to claim 1, wherein the target virtual
2 processor requires access to the CPU, wherein the yielding virtual processor
3 controls the CPU.

1 3. The method according to claim 1, further comprising
2 generating a yield command from the virtual processor, wherein the yield
3 command includes pointer and status information regarding the target virtual
4 processor.

1 4. The method according to claim 1, further comprising
2 assigning status information to the target virtual processor.

1 12. The apparatus according to claim 11, wherein the target
2 virtual processor requires access to the CPU, wherein the yielding virtual
3 processor controls the CPU.

1 13. The apparatus according to claim 11, wherein the program
2 initiates generation of a yield command from the virtual processor, wherein the
3 yield command includes pointer and status information regarding the target
4 virtual processor.

1 14. The apparatus according to claim 11, wherein the program
2 initiates an assignment of a target count to the target virtual processor.

1 15. The apparatus according to claim 14, wherein the program
2 initiates a comparison of the target count to a presented count conveyed in the
3 yield command.

1 16. The apparatus according to claim 11, wherein the program
2 initiates abandonment of the yield in response to a yield-to-active command.

1 17. The apparatus according to claim 11, wherein the program
2 initiates a designation of the yielding virtual processor as waiting for the target
3 processor.

1 18. The apparatus according to claim 11, wherein the program
2 designates the target virtual processor as having a yielding processor waiting
3 for the target virtual processor.

- 1 19. A program product, comprising:
2 (a) a program configured to initiate a request for a yield
3 of a CPU controlled by a yielding virtual processor among a
4 plurality of virtual processors in a logically partitioned data
5 processing system, wherein the request designates a target
6 virtual processor from among the plurality of virtual processors;
7 and further configured to logically reassign control of the CPU
8 from the yielding virtual processor to the target virtual
9 processor.
10 (b) a signal bearing medium bearing the first program.
- 1 20. The program product of claim 19, wherein the signal
2 bearing medium includes at least one of a recordable medium and a
3 transmission-type medium.